

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/557,351
Source: pc/10
Date Processed by STIC: 11/28/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/557,351

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220>
 → Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid

9.2

RAW SEQUENCE LISTING

DATE: 11/28/2005

PATENT APPLICATION: US/10/557,351

TIME: 13:21:33

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11282005\J557351.raw

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61          20
63 <210> SEQ ID NO: 5
64 <211> LENGTH: 30
65 <212> TYPE: PRT
66 <213> ORGANISM: Homo sapiens
68 <400> SEQUENCE: 5
69 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
70 1          5          10          15
71 Ala Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp
72          20          25          30
74 <210> SEQ ID NO: 6
75 <211> LENGTH: 23
76 <212> TYPE: PRT
77 <213> ORGANISM: Rattus norvegicus
79 <400> SEQUENCE: 6
80 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
81 1          5          10          15
82 Ser Gly Leu Leu Met Gly Leu
83          20
85 <210> SEQ ID NO: 7
86 <211> LENGTH: 30
87 <212> TYPE: PRT
88 <213> ORGANISM: Rattus norvegicus
90 <400> SEQUENCE: 7
91 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
92 1          5          10          15
93 Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp
94          20          25          30
96 <210> SEQ ID NO: 8
97 <211> LENGTH: 23
98 <212> TYPE: PRT
99 <213> ORGANISM: Mus musculus
101 <400> SEQUENCE: 8
102 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
103 1          5          10          15
104 Ser Gly Leu Leu Met Gly Leu
105          20
107 <210> SEQ ID NO: 9
108 <211> LENGTH: 30
109 <212> TYPE: PRT
110 <213> ORGANISM: Mus musculus
112 <400> SEQUENCE: 9
113 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
114 1          5          10          15
115 Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Gln Trp
116          20          25          30
118 <210> SEQ ID NO: 10
119 <211> LENGTH: 23
120 <212> TYPE: PRT

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/557,351

DATE: 11/28/2005

TIME: 13:21:33

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11282005\J557351.raw

121 <213> ORGANISM: Sus scrofa
 123 <400> SEQUENCE: 10
 124 Trp Tyr Lys His Thr Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
 125 1 5 10 15
 126 Ala Gly Leu Leu Met Gly Leu
 127 20

129 <210> SEQ ID NO: 11

130 <211> LENGTH: 30

131 <212> TYPE: PRT

132 <213> ORGANISM: Sus scrofa

134 <400> SEQUENCE: 11

135 Trp Tyr Lys His Thr Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala

136 1 5 10 15

137 Ala Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Met Trp

138 20 25 30

140 <210> SEQ ID NO: 12

141 <211> LENGTH: 14

142 <212> TYPE: PRT

143 <213> ORGANISM: Artificial Sequence

145 <220> FEATURE:

146 <223> OTHER INFORMATION: Biotin-labeled peptide

148 <220> FEATURE:

149 <221> NAME/KEY: MOD_RES

150 <222> LOCATION: 14

151 <223> OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin

(Long Arm) Maleimide

152 (Vector Laboratories).

154 <400> SEQUENCE: 12

W--> 155 Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Xaa

156 5 10

158 <210> SEQ ID NO: 13

159 <211> LENGTH: 14

160 <212> TYPE: PRT

161 <213> ORGANISM: Artificial Sequence

163 <220> FEATURE:

164 <223> OTHER INFORMATION: Biotin-labeled peptide

166 <220> FEATURE:

167 <221> NAME/KEY: MOD_RES

168 <222> LOCATION: 1

169 <223> OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin

(Long Arm) Maleimide

170 (Vector Laboratories).

172 <400> SEQUENCE: 13

W--> 173 Xaa His Thr Val Gly Arg Ala Ala Gly Leu Leu Met Gly Leu

174 5 10

176 <210> SEQ ID NO: 14

177 <211> LENGTH: 16

178 <212> TYPE: PRT

179 <213> ORGANISM: Artificial Sequence

181 <220> FEATURE:

182 <223> OTHER INFORMATION: Biotin-labeled peptide

*yes, but this is not a sufficient
 explanation of Artificial Sequence
 (give source of genetic material)
 see item 11 on Euro summary
 sheet*

same

RAW SEQUENCE LISTING

DATE: 11/28/2005

PATENT APPLICATION: US/10/557,351

TIME: 13:21:34

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11282005\J557351.raw

184 <220> FEATURE:

185 <221> NAME/KEY: MOD_RES

186 <222> LOCATION: 1

187 <223> OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin
(Long Arm) Maleimide

188 (Vector Laboratories).

190 <400> SEQUENCE: 14

W--> 191 Xaa Ala Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp

192 5 10 15

194 <210> SEQ ID NO: 15

195 <211> LENGTH: 328

196 <212> TYPE: PRT

197 <213> ORGANISM: Homo sapiens

199 <400> SEQUENCE: 15

200 Met Asp Asn Ala Ser Phe Ser Glu Pro Trp Pro Ala Asn Ala Ser Gly

201 1 5 10 15

202 Pro Asp Pro Ala Leu Ser Cys Ser Asn Ala Ser Thr Leu Ala Pro Leu

203 20 25 30

204 Pro Ala Pro Leu Ala Val Ala Val Pro Val Val Tyr Ala Val Ile Cys

205 35 40 45

206 Ala Val Gly Leu Ala Gly Asn Ser Ala Val Leu Tyr Val Leu Leu Arg

207 50 55 60

208 Ala Pro Arg Met Lys Thr Val Thr Asn Leu Phe Ile Leu Asn Leu Ala

209 65 70 75 80

210 Ile Ala Asp Glu Leu Phe Thr Leu Val Leu Pro Ile Asn Ile Ala Asp

211 85 90 95

212 Phe Leu Leu Arg Gln Trp Pro Phe Gly Glu Leu Met Cys Lys Leu Ile

213 100 105 110

214 Val Ala Ile Asp Gln Tyr Asn Thr Phe Ser Ser Leu Tyr Phe Leu Thr

215 115 120 125

216 Val Met Ser Ala Asp Arg Tyr Leu Val Val Leu Ala Thr Ala Glu Ser

217 130 135 140

218 Arg Arg Val Ala Gly Arg Thr Tyr Ser Ala Ala Arg Ala Val Ser Leu

219 145 150 155 160

220 Ala Val Trp Gly Ile Val Thr Leu Val Val Leu Pro Phe Ala Val Phe

221 165 170 175

222 Ala Arg Leu Asp Asp Glu Gln Gly Arg Arg Gln Cys Val Leu Val Phe

223 180 185 190

224 Pro Gln Pro Glu Ala Phe Trp Trp Arg Ala Ser Arg Leu Tyr Thr Leu

225 195 200 205

226 Val Leu Gly Phe Ala Ile Pro Val Ser Thr Ile Cys Val Leu Tyr Thr

227 210 215 220

228 Thr Leu Leu Cys Arg Leu His Ala Met Arg Leu Asp Ser His Ala Lys

229 225 230 235 240

230 Ala Leu Glu Arg Ala Lys Lys Arg Val Thr Phe Leu Val Val Ala Ile

231 245 250 255

232 Leu Ala Val Cys Leu Leu Cys Trp Thr Pro Tyr His Leu Ser Thr Val

233 260 265 270

234 Val Ala Leu Thr Thr Asp Leu Pro Gln Thr Pro Leu Val Ile Ala Ile

235 275 280 285

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Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11282005\J557351.raw

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236 Ser Tyr Phe Ile Thr Ser Leu Ser Tyr Ala Asn Ser Cys Leu Asn Pro
237      290                      295                      300
238 Phe Leu Tyr Ala Phe Leu Asp Ala Ser Phe Arg Arg Asn Leu Arg Gln
239 305                      310                      315                      320
240 Leu Ile Thr Cys Arg Ala Ala Ala
241                      325
243 <210> SEQ ID NO: 16
244 <211> LENGTH: 984
245 <212> TYPE: DNA
246 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 16
249 atggacaacg cctcgttctc ggagccctgg cccgccaacg catcggggccc ggaccgcggcg      60
250 ctgagctgct ccaacgcgtc gactctggcg ccgctgccgg cgccgctggc ggtggctgta      120
251 ccagttgtct acgcggtgat ctgcgcgctg ggtctggcgg gcaactccgc cgtgctgtac      180
252 gtgttgctgc gggcgccccg catgaagacc gtcaccaacc tgttcacct caacctggcc      240
253 atcgccgacg agctcttcac gctgggtgctg cccatcaaca tcgccgactt cctgctgcgg      300
254 cagtggccct tcggggagct catgtgcaag ctcatcgtgg ctatcgacca gtacaacacc      360
255 ttctccagcc tctacttcct caccgtcatg agcgccgacc gctacctggg ggtggtggcc      420
256 actgcggagt cgcgccgggt ggccggccgc acctacagcg ccgcgcgcgc ggtgagcctg      480
257 gccgtgtggg ggatcgtcac actcgtcgtg ctgcccttcg cagtcttcgc ccggctagac      540
258 gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccgaggc cttctggtgg      600
259 cgcgcgagcc gcctctacac gctcgtgctg ggcttcgccca tccccgtgtc caccatctgt      660
260 gtcctctata ccacctgct gtgcggctg catgccatgc ggctggacag ccacgccaaag      720
261 gccctggagc gcgccaagaa gcgggtgacc ttctggtgg tggcaatcct ggcggtgtgc      780
262 ctctctgct ggacgcccta ccacctgagc accgtggtgg cgctcaccac cgacctcccg      840
263 cagacgccgc tggtcacgc tatctcctac ttcatcacca gcctgagcta cgccaacagc      900
264 tgcctcaacc cttcctcta cgccttcctg gacgccagct tccgcaggaa cctccgccag      960
265 ctgataactt gccgcgcggc agcc
266                      984
267 <210> SEQ ID NO: 17
268 <211> LENGTH: 333
269 <212> TYPE: PRT
270 <213> ORGANISM: Homo sapiens
272 <400> SEQUENCE: 17
273 Met Gln Ala Ala Gly His Pro Glu Pro Leu Asp Ser Arg Gly Ser Phe
274 1                      5                      10                      15
275 Ser Leu Pro Thr Met Gly Ala Asn Val Ser Gln Asp Asn Gly Thr Gly
276      20                      25                      30
277 His Asn Ala Thr Phe Ser Glu Pro Leu Pro Phe Leu Tyr Val Leu Leu
278      35                      40                      45
279 Pro Ala Val Tyr Ser Gly Ile Cys Ala Val Gly Leu Thr Gly Asn Thr
280      50                      55                      60
281 Ala Val Ile Leu Val Ile Leu Arg Ala Pro Lys Met Lys Thr Val Thr
282 65                      70                      75                      80
283 Asn Val Phe Ile Leu Asn Leu Ala Val Ala Asp Gly Leu Phe Thr Leu
284      85                      90                      95
285 Val Leu Pro Val Asn Ile Ala Glu His Leu Leu Gln Tyr Trp Pro Phe
286      100                     105                     110
287 Gly Glu Leu Leu Cys Lys Leu Val Leu Ala Val Asp His Tyr Asn Ile
288      115                     120                     125

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/557,351

DATE: 11/28/2005
TIME: 13:21:35

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\11282005\J557351.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>

to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; Xaa Pos. 14 /

Seq#:13; Xaa Pos. 1 /

Seq#:14; Xaa Pos. 1 /

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/557,351

DATE: 11/28/2005

TIME: 13:21:35

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\11282005\J557351.raw

L:8 M:270 C: Current Application Number differs, Replaced Current Application Number

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0

L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0

L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0